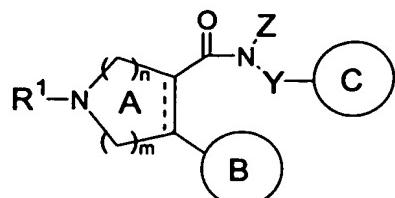


Claims

1. A compound represented by the formula

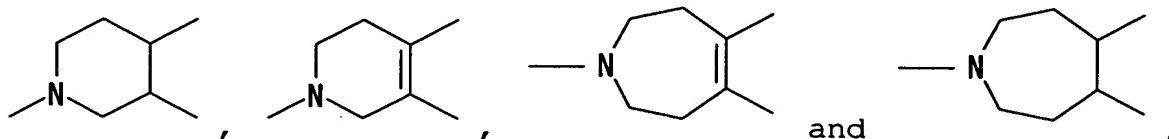


(I)

5 wherein ring A is a nitrogen-containing heterocycle optionally further having substituent(s), ring B and ring C are each an aromatic ring optionally having substituent(s), R¹ is a hydrogen atom, a hydrocarbon group optionally having substituent(s), an acyl group or a heterocyclic group
10 optionally having substituent(s), Z is an optionally halogenated C₁₋₆ alkyl group, Y is a methylene group optionally having substituent(s), m and n are each an integer of 0 to 5, m+n is an integer of 2 to 5, and --- is a single bond or a double bond, or a salt thereof.

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2. The compound of claim 1, wherein ring A is any of the rings shown by

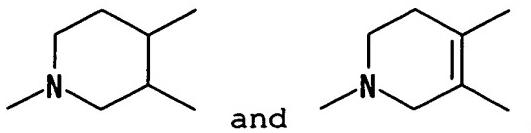


ring B is an optionally substituted phenyl group,

20 ring C is a phenyl group optionally having, as a substituent, a C₁₋₆ alkyl group optionally substituted by a halogen atom, Z is a C₁₋₆ alkyl group, and Y is a methylene group optionally substituted by a C₁₋₄ alkyl group.

25

3. The compound of claim 1, wherein ring A is any of the rings shown by



ring B is a phenyl group optionally substituted by substituent(s) selected from a group consisting of

- (1) a halogen atom and
- 5 (2) a C₁₋₆ alkyl group,

ring C is a phenyl group optionally having, as a substituent, a C₁₋₆ alkyl group optionally substituted by a halogen atom,

R¹ is (1) a hydrogen atom,

(2) a C₁₋₄ alkyl group having, as a substituent, a 5- to
10 7-membered aromatic or non-aromatic heterocyclic group containing, besides carbon atoms, 1 to 4 heteroatoms selected from a group consisting of an oxygen atom, a sulfur atom and a nitrogen atom and optionally having one or two oxo as substituents, or

15 (3) an acyl group represented by the formula: -(C=O)-R^{2'}, -(C=O)-OR^{2'} or -(C=O)-NR^{2'}R³

wherein R^{2'} is

(a) a hydrogen atom,
20 (b) a 5- to 7-membered non-aromatic heterocyclic group containing, besides carbon atoms, 1 or 2 nitrogen atoms, and optionally having 1 to 3 substituents selected from a group consisting of oxo, C₁₋₆ alkyl, phenyl, C₁₋₆ alkyl-carbonyl and C₁₋₆ alkyl-carbonylamino,

25 (c) a C₁₋₆ alkyl group optionally having substituent(s) selected from a group consisting of

(i) a 5- to 7-membered aromatic or non-aromatic heterocyclic group containing, besides carbon atoms, 1 to 4 nitrogen atoms, and optionally having one or two oxo as substituents,
30 (ii) a C₁₋₆ alkyl-carbonylamino group,

- (iii) a mono- or di-C₁₋₆ alkylamino group, and
(iv) a C₁₋₆ alkoxy group,
(d) a C₁₋₆ alkoxy group,
(e) a C₃₋₈ cycloalkyl group optionally having 1 or 2
5 substituents selected from a group consisting of
a C₁₋₆ alkyl-carbonylamino group, a C₁₋₆ alkoxy-
carbonylamino group and an amino group,
(f) a carbamoyl group,
(g) a C₁₋₆ alkoxy-carbonyl group, or
10 (h) a C₁₋₆ alkyl-carbamoyl group, and
R³ is a hydrogen atom or a C₁₋₆ alkyl group,
Z is a C₁₋₆ alkyl group, and
Y is a methylene group optionally substituted by a C₁₋₄ alkyl
group.
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4. A compound selected from a group consisting of
(3R*, 4S*)-1-[(1-acetylpiperidin-4-yl)carbonyl]-N-[3,5-
bis(trifluoromethyl)benzyl]-N-methyl-3-phenylpiperidine-4-
carboxamide,
20 (3R*, 4R*)-N-[3,5-bis(trifluoromethyl)benzyl]-3-(4-fluoro-
2-methylphenyl)-N-methyl-1-[(5-oxo-4,5-dihydro-1H-1,2,4-
triazol-3-yl)methyl]piperidine-4-carboxamide,
25 (3R*, 4R*)-1-[amino(oxo)acetyl]-N-[3,5-
bis(trifluoromethyl)benzyl]-3-(4-fluoro-2-methylphenyl)-N-
methylpiperidine-4-carboxamide,
30 (3R*, 4R*)-N⁴-[3,5-bis(trifluoromethyl)benzyl]-3-(4-
fluoro-2-methylphenyl)-N⁴-methylpiperidine-1,4-dicarboxamide,
and
(3R*, 4R*)-1-(N-acetylglycyl)-N-[3,5-
35 bis(trifluoromethyl)benzyl]-3-(4-fluoro-2-methylphenyl)-N-
methylpiperidine-4-carboxamide, or a salt thereof.

5. A prodrug of the compound of claim 1.
- 35 6. A pharmaceutical agent comprising the compound of claim 1

or a prodrug thereof.

7. The pharmaceutical agent of claim 6, which is a tachykinin receptor antagonist.

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8. The pharmaceutical agent of claim 6, which is an agent for the prophylaxis or treatment of an abnormality of lower urinary tract functions, a digestive organ disease or a central nerve disease.

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9. The pharmaceutical agent of claim 6, which is an agent for the prophylaxis or treatment of an overactive bladder, an irritable bowel syndrome, an inflammatory bowel disease, vomiting, nausea, depression, anxiety neurosis, an anxiety symptom, a pelvic visceral pain or interstitial cystitis.

10. A method for the prophylaxis or treatment of an abnormality of lower urinary tract functions, a digestive organ disease or a central nerve disease, which comprises
20 administering an effective amount of the compound of claim 1 or a prodrug thereof to a mammal.

11. Use of the compound of claim 1 or a prodrug thereof for the production of an agent for the prophylaxis or treatment of
25 an abnormality of lower urinary tract functions, a digestive organ disease or a central nerve disease.